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# TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

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October 29, 2008

TO: Internal File

THRU: Steve Christensen, Team Lead *SKC*

FROM: *John* Joe Helfrich, Biology, Cultural Resources and Land Use

RE: Well G22 and Access Road, Canyon Fuel Co., Dugout Canyon Mine,  
C/007/0039, Task ID #3068

## SUMMARY:

On September 30, 2008 the Division received an amendment from Canyon Fuel Co. to drill a gob vent hole over panel # GIL-8. They are located on the Mount Bartles 7.5 minuet quadrangle in Township 13 South Range 13 East, Section 18. The project is intended to facilitate the uninterrupted mining and maximum recovery of the coal by lowering the percentage of methane gas in the mine. This memo will address the Biology, Cultural Resource and Land use sections of the regulations.

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**TECHNICAL ANALYSIS:**

**GENERAL CONTENTS**

**PERMIT APPLICATION FORMAT AND CONTENTS**

Regulatory Reference: 30 CFR 777.11; R645-301-120.

**Analysis:**

The applicant has submitted information for the review of the Biology, Archaeology and Land Use sections of the regulations.

**Findings:**

The information provided in the application and MRP is adequate to meet the requirements of this section of the regulations.

**ENVIRONMENTAL RESOURCE INFORMATION**

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783. et. Al.

**HISTORIC AND ARCHEOLOGICAL RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.12; R645-301-411.

**Analysis:**

For the G22 and access road project task # 3068, Senco-Phenix conducted a Class III survey. The results showed that there were no historic resources within the project area. The Division defined the "area of potential effect" as the proposed degas well and topsoil storage areas. The Division evaluated the survey information and made a finding of "*no historic properties affected*" for this project. There is current correspondence with SHPO, *concurrence*, for this project (10162008 Outgoing; ~ 10232008~.Incoming).

**Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

## VEGETATION RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.19; R645-301-320.

### Analysis:

Vegetation resource information is provided for in chapter three and attachment 3-1 of the application. Additional references to the approved MRP are included as well as a current list of the threatened, endangered and sensitive plant species for Carbon County. Quantitative data required to characterize the proposed sites was obtained in July of 2008. Vegetation communities for the G22 site and access road are described as Mountain brush/snowberry including sage brush and service berry. A threatened, endangered and sensitive plant survey was also conducted at the proposed site location. No threatened or endangered species were found in the study area. However the sensitive plant species Canyon Sweet vetch, (*Hedysarum occidentale* var. *canone*), was noted in the vicinity of the proposed drill site.

### Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.

## FISH AND WILDLIFE RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.21; R645-301-322.

### Analysis:

Fish and Wildlife resource information is provided for in chapter three by reference to section 322.100 and 322.200 of the MRP and attachment 3-2 of the application. The information includes a description of the wildlife and habitat in the general vicinity of the proposed site location, a 2008 raptor survey indicating that there is one inactive red tailed hawk nest within ½ mile of the proposed disturbance, and a letter-attachment from Dr. Pat Collins of Mount Nebo Scientific Inc. that includes an evaluation of the T&E wildlife species for the proposed access road and drill site locations. According to Mr. Collins evaluation there are no T&E wildlife species located within the proposed surface disturbance locations. The application also includes reclamation practices designed to promote wildlife habitat.

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*Ungulates*

The text in the MRP indicates that there is elk and deer habitat in DWR herd units 24 and 32 that includes the G22 and access road project areas, but that the habitat is not designated as critical or crucial.

*Fish or other aquatics*

There are no known fisheries within the proposed gob vent hole location.

*Migratory Birds, Game Birds, and Raptors*

There are raptor nests within the permit and adjacent areas. The results of the 2008 survey, appendix 3-2B show that there are no raptor nests within ½ mile of the proposed gob hole location.

THREATENED, ENDANGERED, AND SENSITIVE ANIMAL/PLANT SPECIES

*Mexican Spotted Owl (MSO)*

EIS provided documentation stating that the models and other criteria do not indicate that there is suitable habitat for MSO within the gob hole areas. A 2004 calling survey in the area did not produce any responses or presence of owls within the project area.

*Plants*

The application includes a T&E plant evaluation performed by Dr. Patrick Collins, *attachment 3-1*, stating that there are no federally listed T&E plant species within or near the proposed disturbed areas.

**Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

**LAND-USE RESOURCE INFORMATION**

**Analysis:**

The land use resource information is provided for in chapter 4 of the application. It includes a description of the land use at and adjacent to the proposed drill site locations, that being grazing, wildlife, open range, hunting and private use.

**Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

## **MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION**

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

**Analysis:**

### **Archeological Site Maps**

There are archeological maps showing known resource locations within the permit area. These maps are located at the Division's office in Salt Lake in the Confidential File section of the library.

### **Vegetation Reference Area Maps**

The reference area map, *figure 3-1*, for the G22 and access road is included in Volume II, Chapter 3 of the Methane Degas Amendment for holes G1-19 and 31.

**Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

## **OPERATION PLAN**

### **PROTECTION OF PUBLIC PARKS AND HISTORIC PLACES**

Regulatory Reference: 30 CFR 784.17; R645-301-411.

**Analysis:**

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The Permittee's survey performed by Senco-Phenix has identified no parks or historic resources that mining operations may adversely affect.

**Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

**FISH AND WILDLIFE INFORMATION**

Regulatory Reference: 30 CFR Sec. 784.21, 817.97; R645-301-322, -301-333, -301-342, -301-358.

**Analysis:**

**Protection and Enhancement Plan**

Section 333, pages 3-27 through 33 of the MRP describes mitigation and protection measures for wildlife and vegetation.

*Ungulates*

The Division does not consider that traffic or construction will impact the deer and elk during the development of G22 and the access road.

*Fish or other aquatics*

There are no fisheries within the proposed disturbed areas.

*Migratory Birds, Game Birds, and Raptors*

Currently, the Division has no concerns that the project will impact nesting raptors or their nests as there are no active nests within a 0.5-mile buffer zone of the propose disturbed areas.

**Endangered and Threatened Species**

The application includes the results of plant and animal T&E surveys for the 2008 G22 and access road project and a current listing for Carbon County. According to the research and analysis preformed by Mt. Nebo Scientific there are no known federally listed threatened and

endangered plant and wildlife species within the proposed drill site locations. The Division will coordinate with the USFWS and Permittee to prevent taking if any known reports show that there are TE species within the area.

#### *Colorado River Fish*

The text in the application indicates that there will be no water consumption associated with the development of the proposed gob vent hole and access road.

#### **Bald and Golden Eagles**

There are no known bald or golden eagle nests within a 0.5-mile buffer zone of the proposed gob vent hole drilling area.

#### **Wetlands and Habitats of Unusually High Value for Fish and Wildlife**

According to the vegetation study there are no known wetlands within the in the proposed gob vent hole drilling area.

#### **Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

### **VEGETATION**

Regulatory Reference: R645-301-330, -301-331, -301-332.

#### **Analysis:**

Chapter three of the application includes a reference to mitigation and protection measures for wildlife and vegetation that will be employed during the drilling activity. These protection measures are described in the MRP, section 333.300.

#### **Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

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# RECLAMATION PLAN

## GENERAL REQUIREMENTS

Regulatory Reference: PL 95-87 Sec. 515 and 516; 30 CFR Sec. 784.13, 784.14, 784.15, 784.16, 784.17, 784.18, 784.19, 784.20, 784.21, 784.22, 784.23, 784.24, 784.25, 784.26; R645-301-231, -301-233, -301-322, -301-323, -301-331, -301-333, -301-341, -301-342, -301-411, -301-412, -301-422, -301-512, -301-513, -301-521, -301-522, -301-525, -301-526, -301-527, -301-528, -301-529, -301-531, -301-533, -301-534, -301-536, -301-537, -301-542, -301-623, -301-624, -301-625, -301-626, -301-631, -301-632, -301-731, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-732, -301-733, -301-746, -301-764, -301-830.

### Analysis:

The application includes a two-phase revegetation plan for the drill sites. First, the redistribution of topsoil and seeding, and second, well plugging and distribution of remaining topsoil.

### Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.

## POSTMINING LAND USES

Regulatory Reference: 30 CFR Sec. 784.15, 784.200, 785.16, 817.133; R645-301-412, -301-413, -301-414, -302-270, -302-271, -302-272, -302-273, -302-274, -302-275.

### Analysis:

The reclamation seed mix will be comprised of species indigenous to the area and capable of supporting the postmining land use for grazing and wildlife. The seed mix is included in chapter three, page 3-22, table 3-2 of the application.

### Findings:

The information provided in the application is adequate to meet the requirements of this section of the regulations.



## **PROTECTION OF FISH, WILDLIFE, AND RELATED ENVIRONMENTAL VALUES**

Regulatory Reference: 30 CFR Sec. 817.97; R645-301-333, -301-342, -301-358.

### **Analysis:**

The application includes enhancement and protection measures during the reclamation phase of operations. For the gob vent hole project, enhancement measures include the application of a seed mix that is suitable for wildlife habitat. Additional protection measures are included in section 333.300 of the MRP.

### **Findings:**

The information provided in the application is adequate to meet the requirements of this section of the regulations.

## **REVEGETATION**

Regulatory Reference: 30 CFR Sec. 785.18, 817.111, 817.113, 817.114, 817.116; R645-301-244, -301-353, -301-354, -301-355, -301-356, -302-280, -302-281, -302-282, -302-283, -302-284.

### **Analysis:**

#### **Revegetation: General Requirements**

For the G22 gob vent hole and access road project, the Permittee plans to use seed and apply mulch. The seed mixes for reclamation are listed in chapter three, page 3-22, table 3-2 of the application. The Permittee will use the "reference area method" for measuring the standard of success. The NRCS will assign range site Ecological Site Descriptions and productivity values for the drill site and access road.

#### **Revegetation: Timing**

The applicant has proposed to initiate reclamation during the first favorable planting season, usually fall.

### **Findings:**

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The information provided in the application is adequate to meet the requirements of this section of the regulations.

**RECOMMENDATIONS:**

The application is recommended for approval.

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